

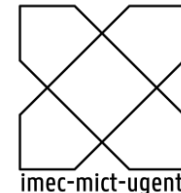
# Income poor, ICT poor?

A survey study on ICT access and difficulties of Flemish income poor people

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# Income poor people are disadvantaged by the abolishment of physical services and counters



# Digital divide/inequality research



**stratification hypothesis**

vs.

**normalization hypothesis**



# In Belgium...

**3-10%**

lacks ICT access at home

**10-20%**

lacks ICT-skills



These percentages are significant higher among low income people

# Percentage among low income people...

**3-10%**

Lacks ICT access  
at home

**10-20%**

Lacks ICT-skills

**20-40%**

**30-40%**

Our conclusion may seem not suprising...

however, the absence of figures...

 may result in detrimental policy decisions.



**Digitale overheid**

## Visie gebruiksvriendelijke digitale dienstverlening

De samenleving digitaliseert in snel tempo. Veel burgers worden geconfronteerd met deze digitaliserende maatschappij. Nu de Vlaamse overheid zichzelf als doel stelt om tegen 2020 alle administratieve transacties tussen overheid en burgers of lokale besturen en ondernemingen via digitale kanalen aan te bieden, met een maximale benadering vanuit een virtueel en digitaal loket, zijn serieuze inspanningen nodig om alle burgers op de kar te krijgen.

### **Diversiteit in burgers, diversiteit in aanpak**

Bij alle processen van digitalisering moet rekening worden gehouden met de manier waarop verschillende burgers met digitale toepassingen omgaan. Elke burger is anders en heeft andere motieven om gebruik te maken van digitale dienstverlening. Sommigen vinden heel snel hun weg in het digitale landschap, andere doelgroepen ontbreekt het aan toegang, vaardigheden, motivatie, vertrouwen en een sociaal netwerk dat hen ondersteunt. Zij hebben hulp nodig om mee te kunnen in de online samenleving.

De Vlaamse overheid wil de toegankelijkheid van de nieuwe digitale diensten voor alle burgers nastreven.

# Method and sample

**People** are considered as **poor** when they have a monthly OECD equivalent **income**  $\leq$  **€1250**

## PLOS ONE

### RESEARCH ARTICLE

Development and psychometric properties of the Digital Difficulties Scale (DDS): An instrument to measure who is disadvantaged to fulfill basic needs by experiencing difficulties in using a smartphone or computer

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### OPEN ACCESS

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**Poor people**  
***n* = 58**

**Non-poor people**  
***n* = 569**



58.6% men

48.7% men

Age<sub>range</sub> = 18-64  
Age<sub>mean</sub> = 47.2  
Age<sub>SD</sub> = 11.5

Age<sub>range</sub> = 18-64  
Age<sub>mean</sub> = 39.6  
Age<sub>SD</sub> = 13.2

19.0% employed

78.2% employed

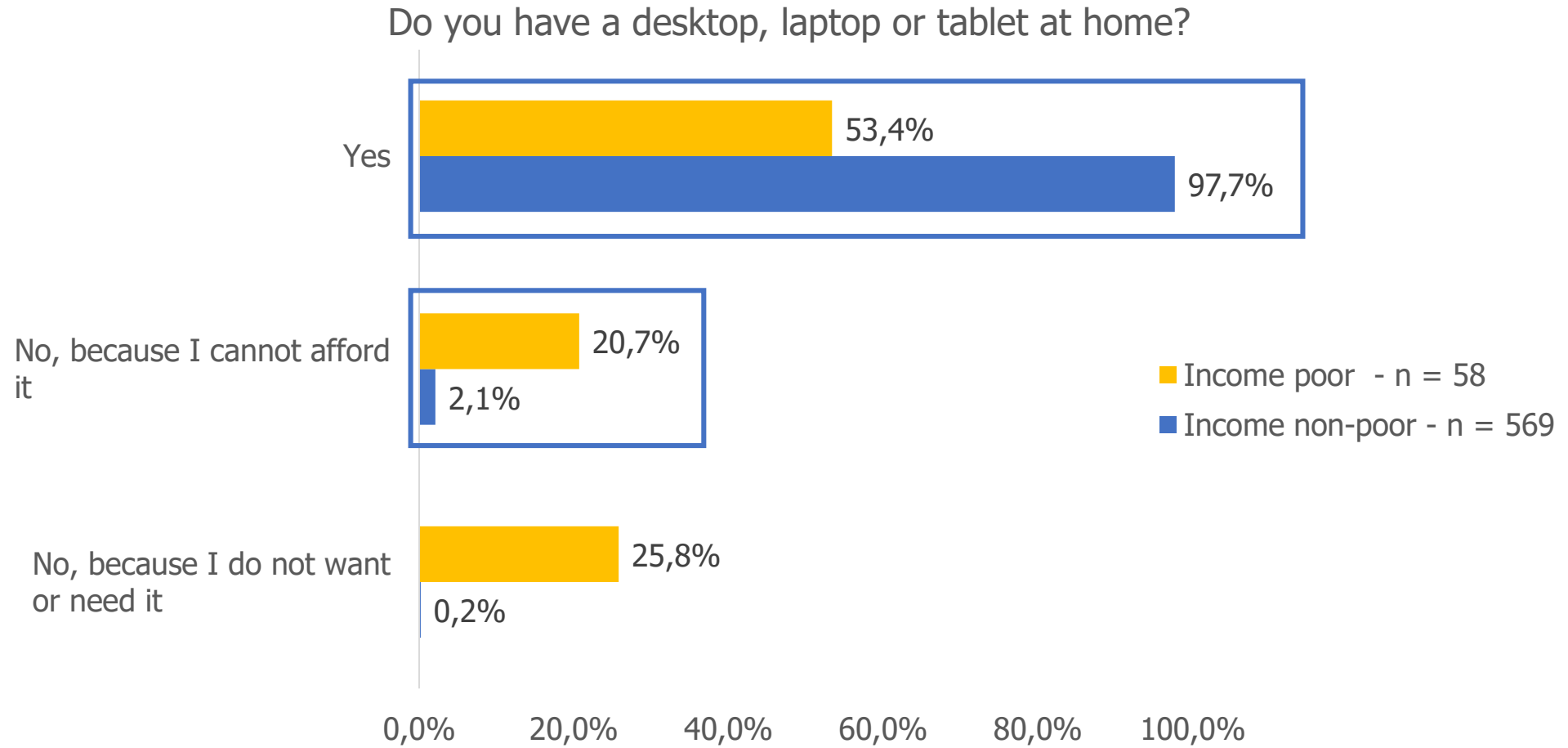
50.0% has disability  
or health problem

23.2% has disability  
or health problem

41.4% migration  
background

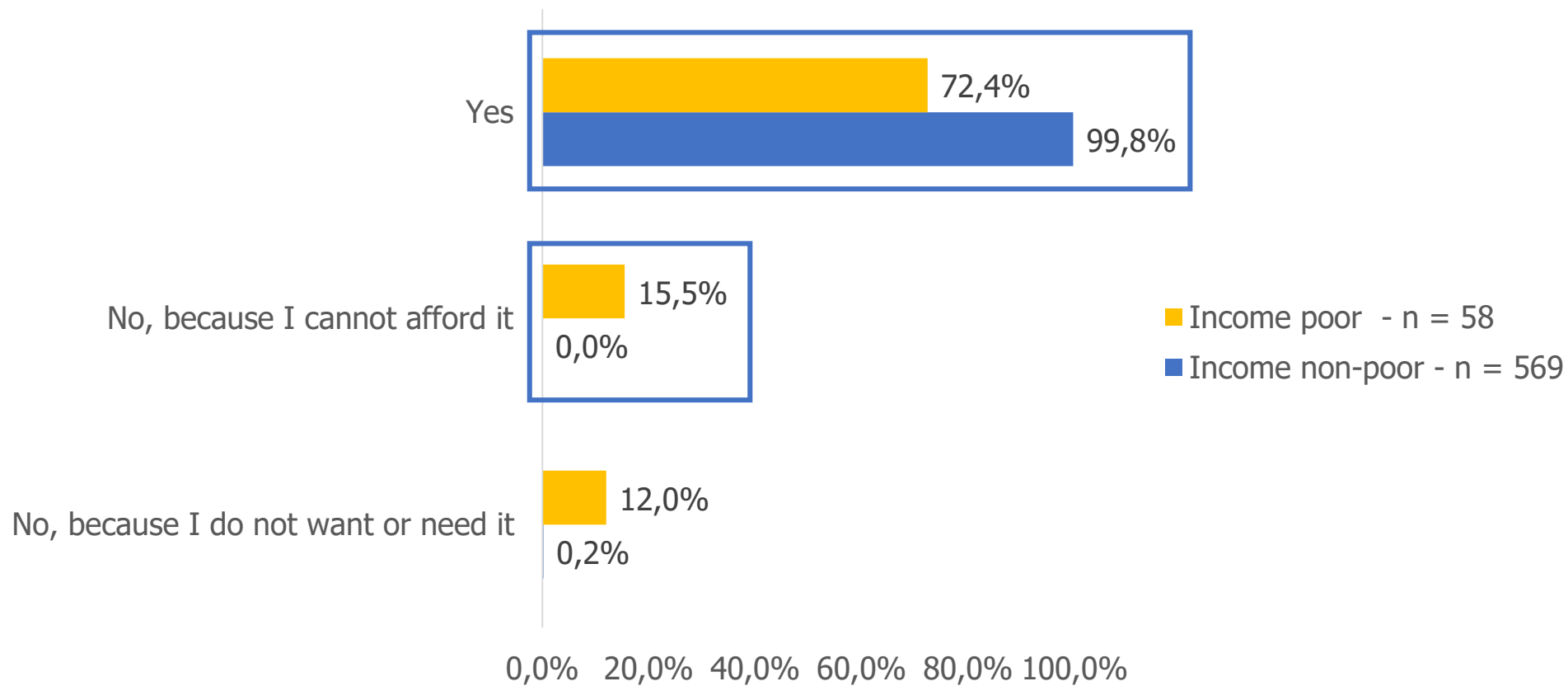
8.6% migration  
background

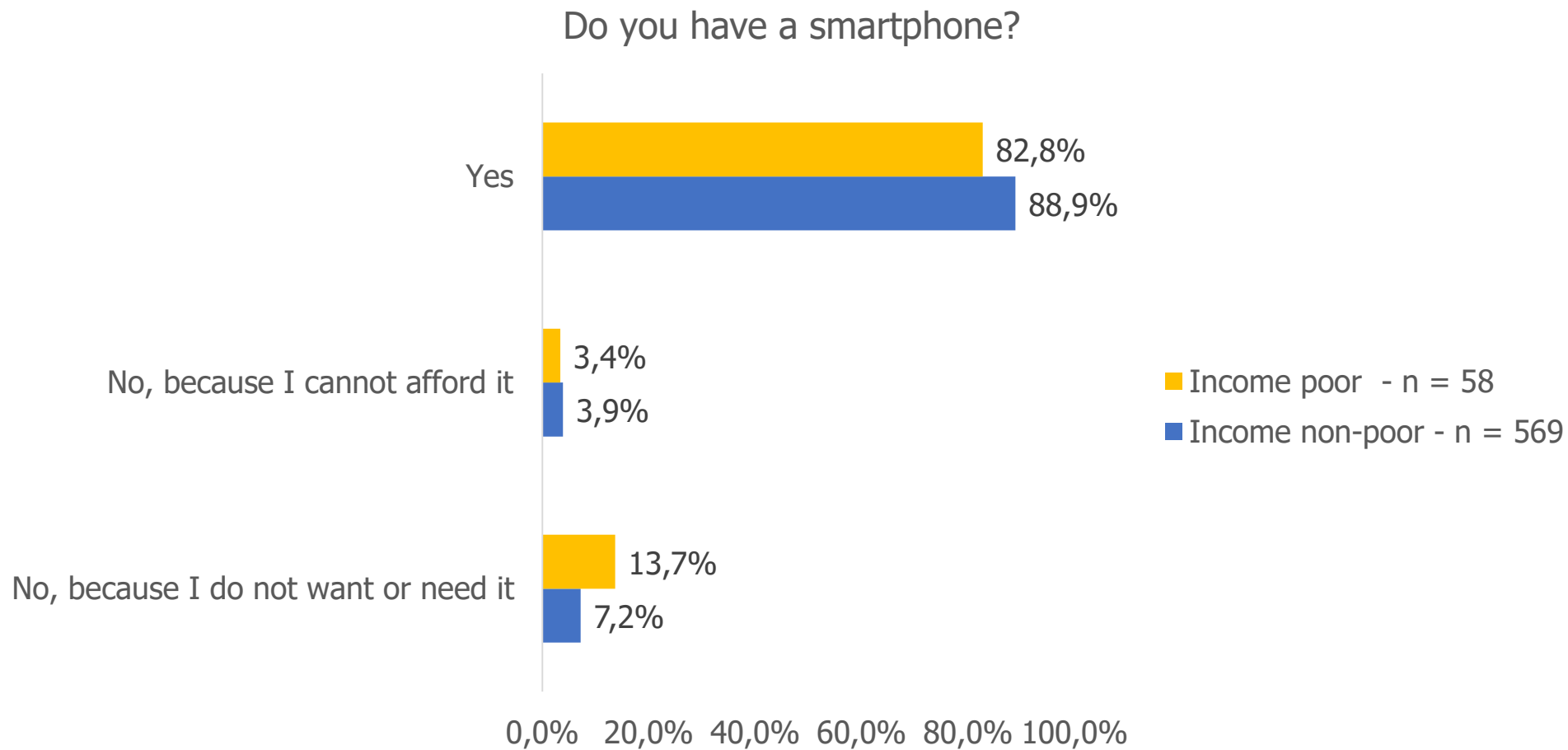
# Results



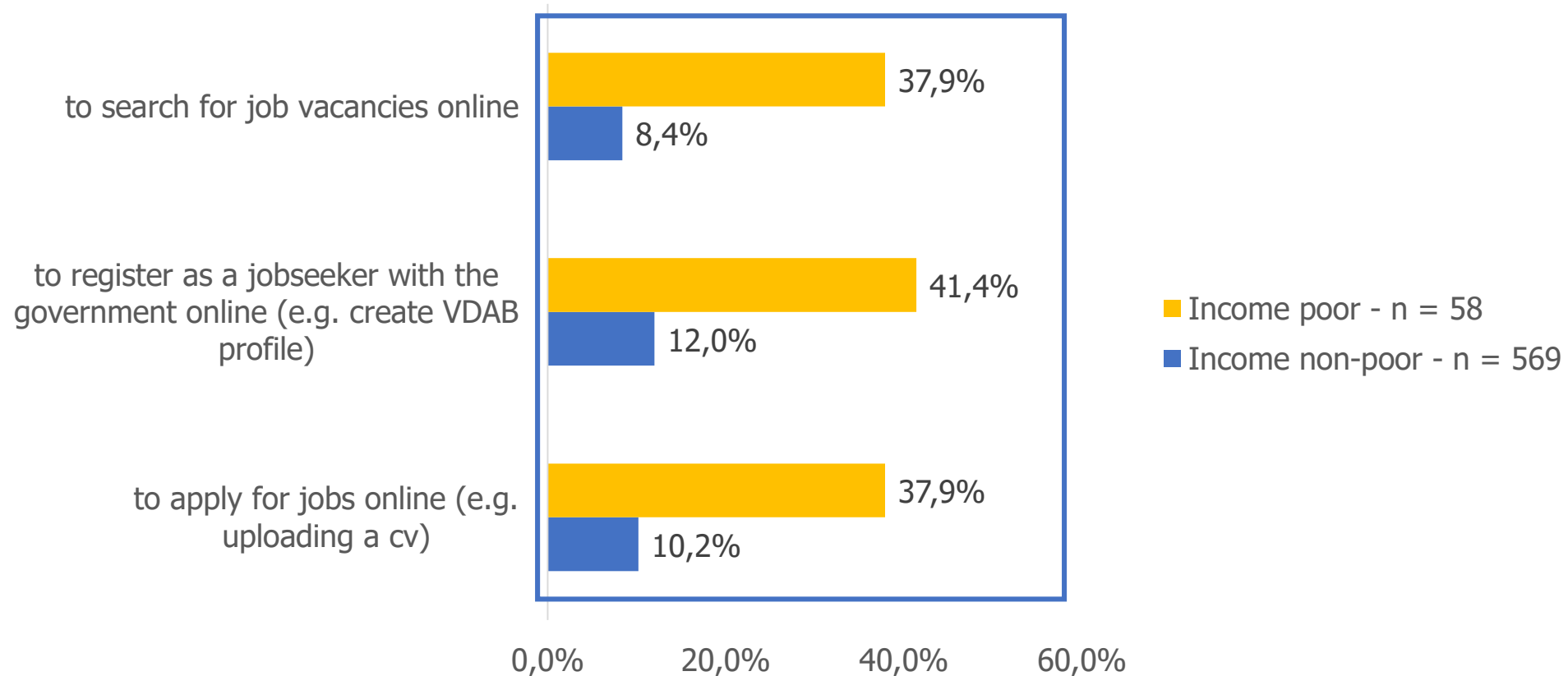


Do you have an internet connection at home?



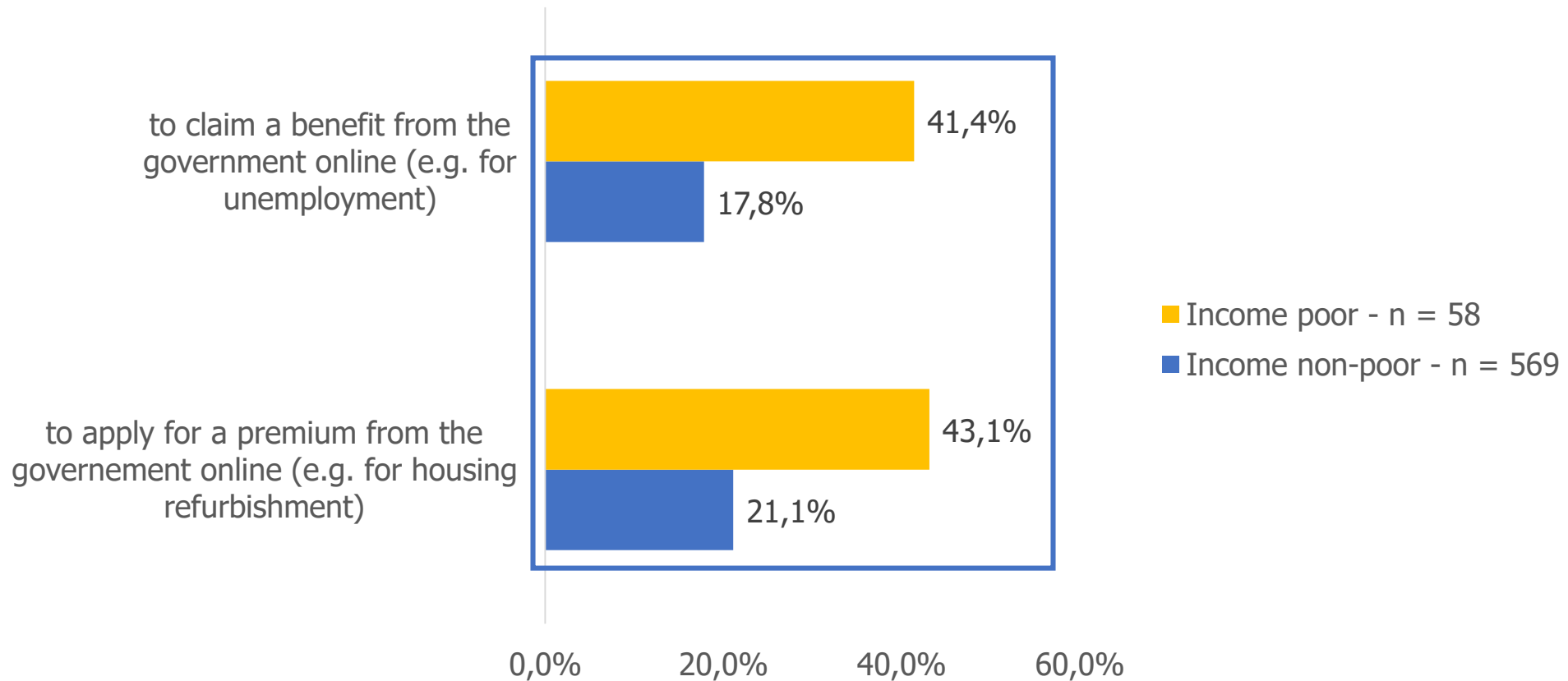


## Percentage respondents who have (rather) difficulties...



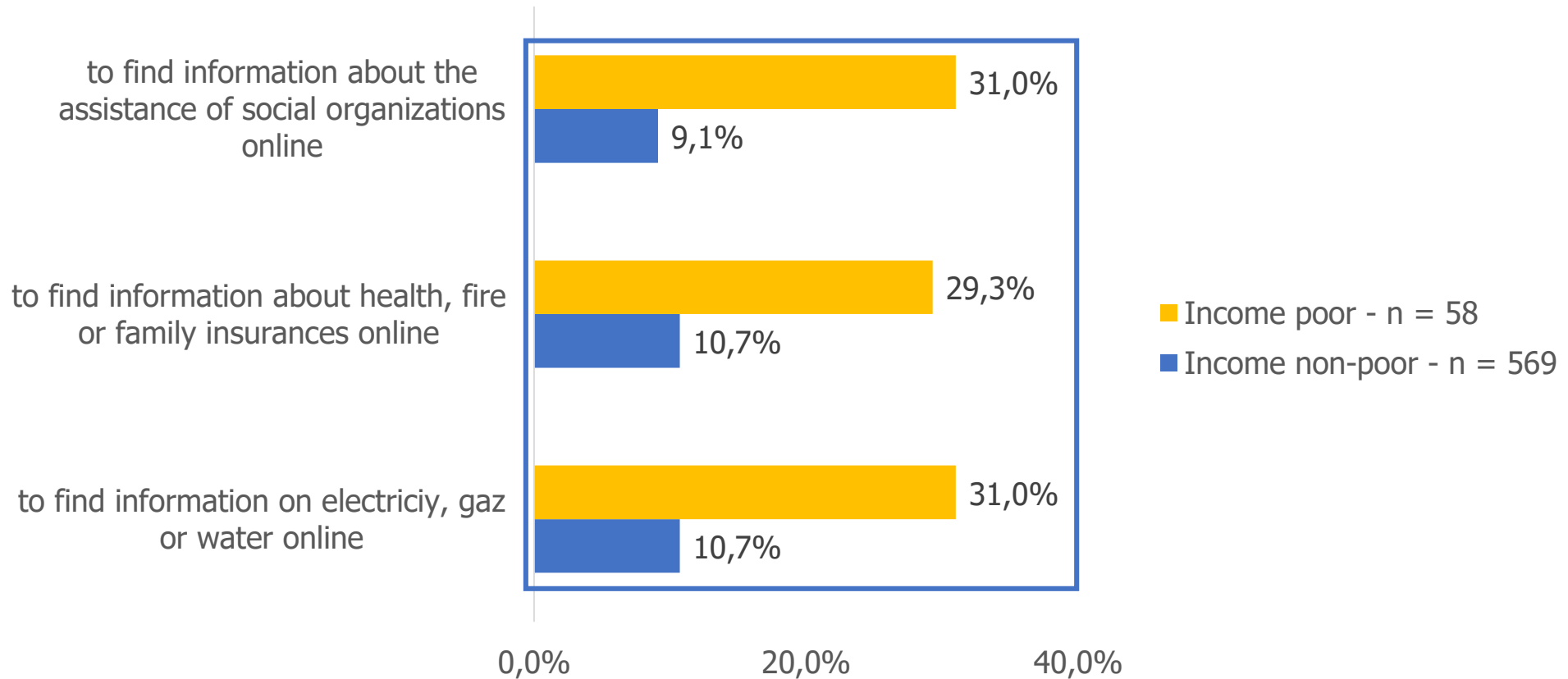


### Percentage respondents who have (rather) difficulties...





### Percentage respondents who have (rather) difficulties...





# Limitations

- Convenience sampling strategy
- Self-report measures
- Presence of researcher when questioning income poor people
- Sample size of income poor people





# Conclusion

- A significant amount of income poor people lack ICT access at home (by financial constraint)
- 30-40% of income poor people have difficulties to use the internet for basic needs, compared to 10-15% of income non-poor people



# Implications

- Subsidy system for internet connection at home
- ICT devices at a social rate to income poor people and families
- Minimum of non-digital services and administrations



Thank you for your attendance!  
Want to know more about our research?

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# References

- Anrijs, S., Ponnet, K., & De Marez, L. (2020). Development and psychometric properties of the Digital Difficulties Scale (DDS): An instrument to measure who is disadvantaged to fulfill basic needs by experiencing difficulties in using a smartphone or computer. *PLOS ONE*, 15(5), e0233891. <https://doi.org/10.1371/journal.pone.0233891>
- Brotcorne, P., & Mariën, I. (2020). *Barometer van de Digitale Inclusie*. <https://e-inclusie.be/onderzoeken/2020-barometer-digitale-inclusie>
- Hargittai, E. (2003). The digital divide and what to do about it. In *New economy handbook* (pp. 821–839).
- Mingo, I., & Bracciale, R. (2018). The Matthew effect in the Italian digital context: The progressive marginalization of the “poor.” *Social Indicators Research*, 135(2), 629–659. <https://doi.org/10.1007/s11205-016-1511-2>
- Mossberger, K., Tolbert, C. J., & Stansbury, M. (2003). *Virtual inequality: Beyond the digital divide*. Georgetown University Press.
- Ragnedda, M., Ruiu, M. L., & Addeo, F. (2019). Measuring digital capital: An empirical investigation. *New Media & Society*, 146144481986960. <https://doi.org/10.1177/1461444819869604>
- Helsper, E. J., & van Deursen, A. (2017). Do the rich get digitally richer? Quantity and quality of support for digital engagement. *Information, Communication & Society*, 20(5), 700–714. <https://doi.org/10.1080/1369118X.2016.1203454>